## A0882

WILDFOWLING AND THE LAW

LIBRARY OF

WILDFOWLING AND THE LAW
II. ALDERT HOCHBAUM

PHIL SCHLADWEILER

Delta Waterfowl Research Station, Delta, Manitoba

Free hunting is a popular illusion. It has never existed in our society; it is impossible to promote. In the beginning of our present North American culture, we intruded upon native peoples who were restricted in their hunting patterns by tribal rules and by inter-tribal strife. The white pioneer simply hunted beyond the realm of his own laws and called it "free." Wherever civilization caught up with the frontier, laws restricting shooting soon followed. Men who share their countryside with neighbors must live by law and order.

Although free hunting is an illusion, the freedom to hunt is a fact as firm and solid as Plymouth Rock. One definition of freedom is government by law, not by man. Our freedom to hunt hinges upon the

laws of hunting.

hunt upon the lands of others.

Freedom to hunt and the right to hun' are not the same. Many have been led to believe they possess an inherited right to take game. This is not true at all. Hunting is always a privilege granted first by law, then by the landowner where the game resides. No citizen has a right to take game without the permission of both his government and the landlord. False ideas about hunting "rights" have led to a wide-spread practice in North America of intruding without permission to

Our North American freedom to the privilege of hunting under law has its foundation in English legal tradition. In the beginning, each man hunted by agreement with his companions. As civilization advanced, bringing domestic culture of animals and crops, hunting became less important to human welfare, but was still followed by some for pleasure and sport. Eventually, leaders usurped the citizen's freedom to hunt, and in England the King claimed ownership of all game in his personal prerogative. Despite certain hunting privileges granted by the Forest Charters (Clarke, 1961), transgressors against royal ownership of game were punished, often severely—or, as Robin Hood, they lived as outlaws.

In 1215 the Magna Carta of King John changed this way of life. Game no longer was owned by the King. It became public property, held in sacred trust by the ruler in his sovereign capacity as the representative of the people. In short, game was held by the crown which protected public ownership. So the pattern of ownership and protection remains to this day in England and this principle forms part of the English common law. American colonists followed the common laws of England; and after the American Revolution, it was

judicially decided that the common law of England constituted the common law of the United States. The common laws of Canada were

inherited in simpler fashion from the same source.

In North America, of course, the State has replaced the sovereign, but the game is still owned by the people, while the State holds primary responsibility for its protection. No citizen can legally reduce game to personal possession except under laws declared by his government, hence the State not only protects game but regulates its narvest. The individual owner of real estate does not legally possess wild game on his land; it remains public property subject to the protective laws regulating hunting everywhere in his district. But a landowner controls his own domain and in this measure controls the abundance, the movements and the hunting (within the law) of the game thereon. In our crowded society, the owner of land becomes ever more important both to the welfare of game and to the survival of hunting.

Laws serve to protect each man from his neighbor who, despite all the artificial trappings of civilization, still is tempted to yield to primal instincts. Man loves, fights, plays and hunts according to inborn patterns he has inherited from his distant beginnings as a social being. The law, in large measure, seeks to establish an orderly relationship between men who live within the confines of society. The more our lawmakers learn of the basic instincts that lead men to behave as they do, the better the law will serve to establish controls

that are effective and good for each man alike.

So it must be in the protection of waterfowl and other game. Man's urge to hunt may be instinctive (Fletcher, 1957: 311). Hunting behavior is a part of each man's inborn inheritance, an overpowering influence throughout his life. The pursuit of crawling, climbing, running things begins before the infant walks. Onmes involving searching, finding and escaping (for some game is dangerous) are part of childhood and adolescence. The grown man's pleasure in striking a mallard dead in the air is akin to the child's thrill in capturing a butterfly. The reward to both is derived not from the dead animal in hand, but from the completion of an instinctive act. And, as Ernest Hemingway exclaimed, "the last is as good as the first."

For primitive man, wildlife was the source of food and clothing, tools and housing. Man's survival depended upon patterns of behavior by which game could be harvested most efficiently. The story of our cultural growth is the history of the development of hunting skills. The first tools that lead us to blend hand and mind were patterned for the hunt.

Three sorts of hunting traditions developed: those dealing with,

techniques, those of regulation, and the traditions of use. Each youngster began to develop his hunting techniques when he set out to capture his first butterfly, his first cricket or frog, skills becoming refined as he grew older and sought prey higher in the life scale. When he finally joined his elders he learned their secrets that had been passed down through family and tribe from time beyond memory. Hunting from its very beginning has been a father-son affair.

Traditions of regulation became important when families joined tribes. Unless there were rules to be obeyed, young, hot-blooded men, keen to hunt but lacking experience, might easily spoil the chase. If a hunter of the Plains-Ojibawa spoiled the buffalo hunt by a move ahead of plan, or otherwise frightened the bison away, his belongings were seized, his tipl cover was cut to shreds and the man himself was severely flogged. For a second offense a man might be banished from the camp, and for a third he might be shot (Howard, 1965:21).

Enforcement of such tribal rules established the first legal restraints upon man's hunting activity. One did not break the rules because of the threat of penalty. As the hunter grew with his companions, he perceived as well the importance of moral restraints. self-discipline which considered the rights of others. Good sportsmanship became part of hunting because of a man's concern for his companion's welfare and pleasure. Our legends carry much evidence of the important role good sportsmanship played in the lives of our primitive ancestors. The ethics of hunting no doubt had their individual beginnings in childhood pursuits of small animals: the first to sight the quarry was allowed prior rights to its capture, and so on. "The development of a moral sense is not given irrevocably by heredity, but depends upon the infant's environment; and the socalled intuitions of right and wrong through which our moral sense operates are not intutions in the ""'t sense, but dependent and conditioned mental acts" (Huxley, 18,

The product of the hunt was dead game in hand. Many and highly revered are the native traditions for its treatment. Thus the Eskimo hunter pours fresh water down the throat of the seal he has just slain, a token reward, a final offering of respect for a skillful and clusive prey. There are certain ways to clean and divide game, methods of preserving and using so that nothing goes to waste. Primitive people living in the wild still eat parts of the animal, such as the intestinal fat, that are quickly discarded by the modern white hunter, who often gets his vitamins from bottles.

Most important of all, dead game in hand had real value. Flesh and bones, skin and sinews were prized possessions as well as items for

. . .

barter, measures of wealth, criteria of one's position in the social hierarchy.

Hence, in the preservation of something of value was the need for protective laws. In the beginning and, for some societies, even still, the hunter was not tied to the land by ownership. For all their freedom, the Eskimo's only property is his portable living and hunting equipment: clothes, tent, tools and implements. The white man, in his social development, added land to his private property. And as owners of land, some became skilled in the culture of game thereon. English game laws, largely by their simplicity, gave each landowner incentive to increase the numbers of game on his property. Game management thus developed its clever and effective techniques

over the centuries, game thriving as a crop.

In North America, where the idea of free hunting was founded on the lawless frontier, each man felt he was breaking away from a shackled pattern. He could go where he wished, shoot what he liked and need ask permission of no man. But it soon developed that game vanished before such patterns. More than this, game unrelated to private property rights lost its real value despite the fact that some of it was taken for the market. It was only through government control, some of it heroic, that the complete extermination of several kinds was prevented. Nowadays we salve our conscience by saying that the passenger pigeon and the buffalo "had to go." If we speak the truth, however, some other species were saved by good laws strictly enforced. The closure of spring shooting of ducks is but one example of such a good law.

To this point I have spoken broadly of game, all the wild things man pursues, slays, and eats. Game as such has many properties governing its management and harvest, hence it is important to deal with the various kinds seperately. My concern here is for waterfowl; and I prefer to devote my main interest to ducks. While each of the many kinds of ducks inhabiting North America has its own distinct way of life, we tend to meet them on waters where two or more species gather together. Hence I'll discuss ducks broadly, coming to specific

differences as these are important to my story.

Ducks as a whole have many characteristics allowing them to maintain relatively high populations. When the "Buffalo Winds" of April soften the prairie snow banks, natives have long since forgotten the bison or the call of Eskimo curlew. But the ducks continue to sweep back to their sloughs and potholes, their pairs spreading far and wide in the annual ritual of reproduction. Ducks are highly successful as game birds for several clear reasons:

1. Most kinds breed as yearlings. Notable exceptions are bufflehead, American goldeneye, Barrows goldeneye.

2. Large clutches are the rule. The average duck lays eight to twelve eggs. Shorebirds, outstandingly unsuccessful as game in our modern world, have four-egg clutches.

3. A long nesting season is enjoyed by most ducks. Most game ducks breed in middle latitudes, one side or the other of the international border. Their spring is long and usually temperate, the nesting season

lasting at least two months for most species, most years.

4. Persistent renesting is a common trait. With two months available, ducks generally try a second time if their first nest is destroyed by predator or agriculture. If the second nest fails, some succeed with a third try. Most shorebirds nest in the Arctic where seasons are short and nesting is a one-shot affair. It is worth noting that the two shorebirds now qualifying as game, woodcock and jacksnipe, as well as the abundant killdeer, nest mainly in middle latitudes where they can and do succeed in renestings.

5. Ducks do not concentrate during the breeding season. Pairs disperse widely at the rate of 2 to 125 pairs per square mile. Thus major local entastrophes, such as fire or flood, destroy only small

segments of the total population.

6. Ducks are clastic in response to their environment. When a nesting range becomes untenable, a pair of ducks does not vanish or die, as occurs in ruffed grouse and some other upland species. Ducks move elsewhere, usually to big lakes or marshes, ready and able to return another year when good nesting conditions are restored.

7. Ducks are long-lived. The potential life span of ducks is 12 years or more. This is longer than the most extensive drought; hence if ducks are protected during dry years, they are ready and available to breed when the drought is broken. This is quite different than in most upland species which have shorter life spans, do not shift habitats

auccemfully and which thus cannot be stockpiled.

8. Ducks are highly adaptable to man's activities. The major breeding ground of most game species is prairie farmland where one is seldom out of sight of ducks or farmsteads during the nesting season. Some of the highest breeding densities of prairie waterfowl are within the limits of metropolitan areas, as Minnespolis-St. Paul in Minnespota, and Regina, Saskatchewan.

9. Young ducks tend to return to breed at or near their birthplace: adult hons come back to nest in the same place each year. This

Although the press new and again noise recovery of a handed duck attaining the age of 15 to 22 or more years, little has been published on the longwrity of waterfewl. The Banding Office of the U.S. Fish & Wildlife Service could not provide me with information on this whijert. Kertright (1922;40) has published some records, now long outdated, which progret that the potential life span of many species of ducks may be longer than the estent of any drought: his estremes being a canvasheck living to 19 years, a redhead 16% years, American pintell 17 years, and a mallard 20 years.

homing of migrant game should be an incentive to local management of breeding grounds.

Until the early part of the 20th century these successful traits were dominant. There are certain other characteristics of ducks, however, which make them vulnerable to pressures of our present culture. Their heavy dependency upon marshland on rich, agricultural soils is a hazard. Their tendency to gregariousness in fall and winter masks real and sometimes drastic declines, leading to regional misunderstandings about total numbers. Their extensive migrations give few people along the way a feeling of responsibility toward nesting populations. The transient nature of their autumn lives does not instill the same respect for local responsibility as holds for most upland and big game. "We demand our share" is today a ruling principle in local waterfowl harvest policy. Many young ducks are not on the wing until late September or early October, many adult females are not recovered from the flightless season of the eclipse moult until then. Thus maternal hens and their young are most vulnerable on their home grounds at a time when they should not be considered fair game. Because of the tight bond between the female and her home breeding marsh, early shooting has already "burned out" local nesting populations of some species, as canvasback in-Minnesota.

Just as ducks thrive or full according to the natural laws governing their life histories, so man must heed these facts of life in establishing the regulations for hunting waterfowl, if wildfowling is to survive. Some of these facts, as the late maturing of diving duck young, the late moulting of adult hens, the strong tie of breeding hens to their home maish have been known for many years, our knowledge and understanding repeatedly strengthened and multiplied by continuing studies. And yet these immutable laws of nature, our most useful and potentially effective tools for management, are seldom recognized in the formulation of waterfowl hunting regulations.

Each of us is aware of the perplexing, everlasting change in values of those goods we need to sustain life. The cost of food, clothing and housing spirals ever upward, to use a popular cliché. And yet in a careful analysis it becomes clear that such inflation does not represent a true increase in value. Our major problem is a steady devaluation of the dollar, which becomes worth less rather than the bread becoming more valuable.

By and large this inflation has its roots in excessive spending, much of it by Government. Government does not produce, nor does it earn.

Money comes from citizens. When taxes do not provide shough to meet the bill, the problem is solved by diluting money, so that without true earnings, without real production, there nevertheless is enough in

hand to meet expenses.

Government is productive of but a small yield of game ducks. Most mallards, pintails, canvasback and other game species are produced on private land, usually at no expense either to the government or to the hunters. As waterfowl decline, as they did during the recent drought, there is no way our governments may "step-up" production to add more birds to the flyways to fill the deficits. Unlike the dollar, the waterfowl cannot be inflated. It is impossible to make two small ducks out of one big one, as is done with dollars. If the traditional pattern of government responsibility were followed, simple protective laws would be coined and enforced in years of low waterfowl production, such laws founded upon the known facts about ducks, and upon the observed behavior of man, the hunter.

But that has not been our choice. Unable to produce, impossible to divide and unwilling to protect by simple, natural laws, we have met the challenge of fewer birds by fielding a span of many new regulations aimed at greatly restricting the hunter's freedom afield. In effect, the present idea is to divide what is left of ducks as far as they will go. Special teal seasons, one-bird mallard bags, bonus scaup and goldeneye, and now the "point" system are nothing more than legal means of devaluating a resource that cannot be physically divided.

There are important features detrimental to both men and bird in these many recent regulations aimed at dividing the harvest of a dwindling resource. First of all, some of the new laws are impossible to follow. Some are virtually impossible to enforce. The result, as in the tragic experience of the "Experimental Teal Season" in the United States and in the special mallard season in Manitoba, is a serious breakdown in respect for law and a heavy waste of birds killed by mistake. The new pattern of wildfowl laws discourages the honest law-abiding citizen, places a premium on irresponsibility. "This erosion of self-responsibility and self-respect surely contributes to the general decline of morality in our time" (Curtiss, 1968:774).

The one-mallard bag, the special teal season, the bonus scaup require that a hunter identify in a flash more than half the species of waterfowl on the marsh—know them against the light, in all their plumages, indeed in dress some trained ornithologists cannot always identify at once with bird in hand. These impossible regulations are placed on hunters to promote recreation—"free" public recreation in good times and bad. Waterfowl hunting policy in the United States

during the lean years of the drought has followed this precept: We, the U.S. Fish and Wildlife Service, "are in the business of supplying recreation to people. Our stock in trade to accomplish this is the migratory bird resource" (Crissey, 1966:5). As the drought progressed and waterfowi production declined we were further advised that the U.S. Fish and Wildlife Service would continue to seek out "underharvested" populations of water owl and try to find ways of devising more recreation through regulations that promote greater pressure on these populations (Gottschalk, 1967).

Ladies and gentlemen, it is impossible for any individual, or any business, or any government agency to provide something it does not produce. A careful review of all available population data reveals that considerably less than 5 percent of ducks produced in the United States are hatched and reared on public lands. The rest come from private property. Moreover, more than 85 per cent of the "stock in trade" shot in the United States is produced in Canada. The pattern of providing ducks from private and foreign sources as free public recreation cannot last. To follow this course will lead only to a dreary.

lawbreaking era of one- or two-bird bags,

Along with this idea of a government providing ducks for general fun, there has generated the impossible dream that waterfowl can be divided equally among the citizens of a country. "Since government agencies are charged with managing waterfowl," we are told, "there is the obligation to provide the best possible distribution of the opportunity to enjoy the sport of waterfowl hunting" (Geis, 1960:5). There is no way we can equate any other wildlife resource. Only because waterfowl are migrants, at the mercy of human beings along all the long way of their travels, does this pipe dream seem feasible. Equality has been attempted by short-stopping birds in massive numbers on public shooting grounds where false refuge and food are used as bait. Equality has been attempted by dividing the declining species, one or two birds to a hunter, as far as they will go.

There are not enough ducks in the land, even in the best of times, to provide equality for all. Moreover, in this drive for equality, duck hunters are being led by the hand away from the very traditions of freedom that have made Canada and the United States strong countries. The regimentation, the institutionalization, the impossible restrictions tend to create a new class of people who are equal only in their willingness to forfeit personal initiative. If one reads the rules of some public hunting grounds he will understand what I mean. Such forced equality removes choice, leaves each man to behave exactly as his neighbor, a person he has never seen before. He is a number on a list who has been directed to his loss of liberty. Just as some

playground dogooders are erasing age-old traditions of childhood games, just as the handicraft officers modify the ancient skills of Indians and Eskimos, so the regimentation of hunters and, indeed, the regimentation of ducks and geese leads to breakdowns in wildfowl traditions. Respect for one's neighbor, sportsmanship, is the first to go. Respect for the 'and is next. The idea of game being something of value is lost. And, finally, respect for the law vanishes. "When men take the law into their own hands—when men, acting as individuals, decide for themselves which laws they will obey and which they will disobey, then we don't have freedom—we have a direct and aggravated assault on all freedoms" (Carpenter, 1968:617).

I suspect the pattern of bad laws and regimented hunting cannot long continue. Some in charge apparently feel the same way. The "in" thing now is planning for bird-watchers. Let me quote from recent U.S. Fish and Wildlife Service reports: "As a result of very restrictive regulations in the Central and Mississippi Flyways, beginning in 1962, people in these two flyways have been conditioned to accept lesser opportunity for harvest and still participate in the recreation provided by waterfowl hunting. Looking into the future, it seems inevitable that duck hunting populations of North America will decrease. Hunting, which is consumptive use of the resource, will suffer a corresponding decrease, but there is no reason why birdwatching, a non-consumptive use, could not increase manyfold" (Anon. 1955:182). "In the not too distant future . . . mansging for bird-watching will become the primary objective of the Bureau program and hunting may come in a poor second" (Crissey, 1966:5).

It seems to me that if there are not enough ducks for hunting there surely are not enough for people to enjoy in other ways. During the past decade a vast population of mallards all but vanished from the Delta Marsh. Their morning and evening flights to and from the fields. were a vital part of the prairie scene for watchers as well as for shooters. But when their flights ended, no longer serving the wildlowler, they were missed by the watcher as well. I suspect that before the waterfowl decline much further, both wildfowlers and birdwatchers will learn that there are ways and means which they can follow to maintain waterfowl at high levels. Indeed, some birdwatchers are leading the way. Thus the late Mr. W. A. Murphy, of East Meadows Ranch, Manitoba, established the prairies' most vigorous breeding population of Canada Geese on a range where nesting geese had been absent for many years. Simply watching the comings and goings of these goese, some 300 pairs nesting on his ranch, (many more breeders spreading far and wide over once-gooseless country) was Mr. Murphy's only reward. Beyond the realm of the managed ranch, many a carter a si mary race " interior and b

hunters enjoyed these geese as well. So it was, too, in Regina, Saskatchewan, where Mr. Fred Bard, another watcher, established a strong breeding clan of Canada geese. And on both ranges, the goose management techniques benefited ducks and other marsh wildlife. Scattered over the prairies are many other nuclei of strong duck and goose breeding populations established by people who were interested only in having wildfowl at case, close by. Waterfowl breeding numbers within and nearby prairie cities and towns are often greater than in the surrounding countryside where habitat is just as good or better. Surely there must be a lesson here that can be broadly applied to the management of ducks and geese as a continuing harvestable resource.

Somewhere along the road there must be a turning point, an end to this federal defeatism, a beginning of public and private interest in productive management of this hardy resource, a just and legal way of protecting and enjoying waterfowl under the simple pattern of freedom established by the Magna Carta in 1215.

First of all, I think we must understand why ducks are considered a "stock in trade" for free public recreation. A large part of the answer may be found in current interpretations of U.S. Public Law 1024, the so called "Fish and Wildlife Act of 1956," which some leaders in the U.S. Fish and Wildlife Service consider to be a mandate to provide

wildlife as a form of public recreation.2.

An important step toward management of waterfowl as a harvestable resource hinges upon government returning to its major function as protector rather than provider of waterfowl. When this vital move is accomplished there must develop a trend toward. simplification of wildfowling laws. More laws have not brought more ducks. There is much evidence that fewer laws, easily understood and ... obeyed by all, readily enforceable and founded upon the biology of waterfowl, should play an important role in the management of a harvestable waterfowl resource. Laws governing the time and the length of season will be paramount in protecting a huntable supply of ducks. The legal hunting season acknowledges mans' ability to turn himself on or off, to confine his hunting activities within a time set by law. When the season is closed, the firing of a gun draws attention to a violation. No matter how clever a man may be or how urgently he wishes to hunt, he is deterred by a crisp, fair law easily enforced. Present day seasons have everywhere favored the hunter, often as these laws encouraged pressure on "underharvested" birdr. By such favors, in the name of recreation, some species are being overshot to the point that, even with drought and drainage, breeders rather than

Public Law 1024-84th Congress, Chapter 1086-2nd Seeden S. 8275.

marshes are in short supply. Bellrose has pointed cut (and long ago) that waterfowl hunting seasons "should depend upon what species of ducks need the greatest protection and whether the hunter or the waterfowl population should be favored" (Bellrose, 1944:371).

There is a tendency to consider delayed openings inportant only in northern regions where, by such delays, moulting adult hens and youngsters just on the wing are not harvested before dispersal from natal marshes. In Illinois, more than halfway down the Mississippi, it has been found that "ducks of many species are most easily killed during the early part of the season . . ." (Bellrose, Loc. cit.). The overshooting of local breeders on duck marshes in the United States has been going on for a long time, has advanced severely during the past twenty years when we have seen nesting canvasback disappear from fine canvasback marshes in Minnesota and North Dakota. Now this decrease is advancing rapidly into Canada. Should it not be much easier to hold breeders by stopping overkilling than to restore these to their marshes after they have vanished?

Within the same framework of seasonal control, the protection of some kinds, as canvasback and redhead, could be much more effective by protecting zones of time and place used most frequently by the species needing protection. Such has been deemed too "complicated" to enforce. Zonal control was not too complicated, however, when it

favored the hunter, as in the experimental teal season.

The daily bag limit is another major form of legal control. Above all things, this limit must not have complications that make it impossible to obey, difficult to enforce. Roland Clement pointed out last year that "hunters should not be expected to behave ethically if they are encouraged to seek satisfaction afield and are then frustrated by circumstances the lawmaker knew all too well could not lead to satisfaction. One mallard or one canvasback in the bag is ridiculous..." (Clement, 1969:349).

No doubt the shooting refuges, with their sad morning line-ups and their skybusting, will always be with us. But there must be far more encouragement to private initiative in waterfowl management; let's get on with the job of encouraging private management. Extension work on how to maintain a good duck marsh should be far more effective than the vastly more expensive task of teaching every man behind the gun how to tell all ducks in all plumages under all hunting conditions.

I suspect there must be international discussions of waterfowl at treaty level. It looks as though some of the "underharvested" populations the U.S. Fish and Wildlife Service wants to provide for public recreation are ducks Canada would like to save as breeders.

Certainly there are many aspects of our international use and misuse of waterfowl that need reconsideration after 54 years on the long downhill run for ducks.

We must place a real value on ducks, indeed on all waterfowl, a valid measure of worth by which something of value is exchanged for the privilege of taking a bag of ducks. If the government is the landowner, so-called quality shooting on public property occurs only where guests pay in fair measure for their hunt. If the landowner is a private citizen, the investment in his duck marsh and its upkeep is his eash contribution toward wildfowling. An important incentive to private management is a no-nonsense bag.<sup>3</sup> If one does not have shooting property, eash paid to the landowner is right and proper. How to reward the prairie farmer of northern pothole ranges, whose product of ducks departs before he can take any harvest, is a hard nut to crack. This must be soluble, but hardly by public purchase or by public management.

And finally there must develop a stronger respect for private property. Such respect does not simply honor the owner's right on his own land, but acknowledges the contributions of private lands to the

community at large.

We have been so dependent for so long on Ottawa and Washington that know-how is often lacking. But is it not more appropriate for government to provide information on private marsh management rather than toward this fruitless and expensive educational program concerned with picayune laws? Is it not more appropriate to provide incentives for private marsh management than to give recreation to men who seldon fully appreciate that the massive cost of their so-called "free" shooting places them on public welfare? No natural resource in this land is free for the taking. To attempt equal division of waterfowl means the end of wildfowling for all. But good laws, erisply enforced, encourage an equality of the privilege of enjoying waterfowl to the measure of each man's personal investment in such enjoyment.

All of this, to some, may sound like "Ivory Tower" thinking. Yet whenever the government has relaxed to encourage private initiative, as in Manitoba, Ontario and in several midwestern states (notably in southern Minnesota), new ideas and new management techniques bringing local increases in wildfowl have resulted as if by magic.

## LITERATURE CITED

Anonymous
1985. Waterfowl habitat requirements. Report of Bureau Conference, U.S. Fish and Wildlife Bervice.

OA 20-nonsense bag limit is one which can be obeyed by any person qualifying for a hunting license, and enforced by any game guardian.

Bellrose, Frank C., Jr. 1944. Buck po Duck populations and kill, an evaluation of some waterfow) regulations in Hitnois, liuil, Hilinois Nat. Hist, Burvey, Urbana.

Carpenter, Den 11. Leaving the problems to others. The Preseman, Vol. 18, No. 10. 1966.

Clarke, C. H. D.
1961. Public ownership of a resource produced on private land. Seminar paper.
Cornell University, Dept. of Conservation Seminar on Private Land Use,
110.

Clement, Roland C.
1969. Instincts, laws and ducks. Trans. 54th N.A. Wildlife Conference, Washington.
Crissey, Walter F.
1968. Present and future role of refuges. Report of Region & Conference, U. S.
Fish and Wildlife Hervice.

Curtise, W. M. The good life, The Freeman, Vol. 18, No. 12,

Ploteher, Roundd 1957. In Inclinet in man, Allen and Unwin, London.

Gels, Asired 13.
1980, Mallard management problems, Midwest Wildlife Conference, Teronto.

Gottechalk, John B. International implications of thirty years of waterfawl management in worth America, International Assoc. of Came and Fish Commissioners, Teronte, 1907.

lieward. James II.
1905. The Plains Olibwa or Bungi, University of South Dakota, Vermillion.

1915. The Plains-Ojibwa or Bungi, University of Hugley, T. H. and Julian Hugley.
1947. Evolution and ethics. Pilot Press, London.
Kortright, Francia H.
1942. The ducks, grees and awans of North A The ducks, grees and awans of North America, American Wildlife Institute. Washington,

## DISCUSSION

VICE CHAIRMAN BELLEORY: This excellent paper gives us much food for thought. Certainly here we can see why Doctor Gottschalk is always caught in a cross-fire of state conservation agencies. They would like more liberal waterfowl regulations so that their hunters can shoot ducks. He is caught in a crossite with the bird watcher, who would like to see no ducks shot and here we see the great diversion of views which are certainly difficult to reconcile among a resource that stretches over three continents and one that so many people have an interest in.
Ma. JOHN GOTTSCHALK: I am sure there are other questions and so I am not

going to take much time. However, I do have two questions.

I have been sitting here trying to think of one broad basic question I could sak Al that might put this whole thing into a nutshell, you know, but it is sort of like managing waterfowl—it is hard to find one big, bread regulation that covers the whole situation. Also, I cannot find a broad question that would give Al the answer. Therefore, I am going to confine myself to two questions.

First of all, I don't really understand what you meen by the misinterpretation of the 1956 fish and wildlife reorganization act and then I would also like to have you say a little bit more about what you consider to be a "no-neuscase bag."

DOGTOR HOGHBAUM; First of all, may I sak you one question? What is the

Interpretation of your agency with regard to this act?
Ma. Gorrsonalk: Well, I think that is going against the rules. (Laughter) I am supposed to be asking you questions but I will tell you that we interpret this act as a broad mandate on the part of Congress to provide the greatest opportunity for recreation from the resources that the Federal Government has any responsibility for managing and that can be obtained without sacrifice of the

long-term utilization or potential of the resource.

Doorva Hoomsaus: Well, all I can say is that the reason this was raised was because so many times in so many parts of the Fish and Wildlife Service, when this question comes up, whether you feel it proper to provide free shooting to the public when you are not producing the ducks, the answer is in this act which you

cite to us. I am one man trying to find the answer.

Now, although I am not a lawyer, I have talked with the legal profession about a this and I have found that the general appraisal of this law simply does not